

**REMARKS**

**A. Status of Claims**

Claims 1-4, 7-11, 13-15, 20, and 25 are pending.

**B. Fourth Supplemental Information Disclosure Statement Mailed May 10, 2004**

A Fourth Supplemental Information Disclosure Statement was mailed to the Office on May 10, 2004. Applicants respectfully request that the Examiner review the Statement and make references listed therein of record in the present application.

**C. Rejection of Claims 1-4, 7-11, 13-15, 20 and 25 for Obviousness-type Double Patenting over Claims 18-20 of U.S. Patent No. 6,482,843.**

Claims 1-4, 7-11, 13-15, 20 and 25 were rejected as unpatentable over Claims 18-20 of U.S. Patent No. 6,482,843.

**Response**

The present application and the '843 patent are commonly owned by UAF Technologies and Research, LLC. by virtue of the attached following documents:

Present application (USSN 09/676,032): Attachment A provides a copy of the assignment from the University of Arizona Foundation to UAF Technologies and Research, LLC. The assignment was filed with the Patent Office on October 20, 2003 and was recorded at Reel 014051/, Frame 0993. The citation of this application is on page 1, entry no. 2, of the recordation document.

U.S. 6,482,843 (USSN 09/676,407): Attachment B provides a copy of the assignment from the University of Arizona Foundation to UAF Technologies and Research, LLC. The assignment was filed with the Patent Office on October 20, 2003 and was recorded at Reel 014051/, Frame 0993. The citation of this application is on page 3, entry no. 18, of the recordation document.

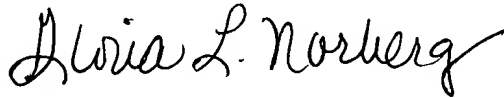
Provided herewith as Attachment C is a terminal disclaimer over the '843 patent. The filing of a terminal disclaimer is understood to simply serve the statutory function of removing the rejection of double patenting, and raises neither a presumption nor estoppel on the merits of the rejection.

Applicants respectfully request that these rejections be withdrawn.

**D. Conclusion**

It is believed that all matters of the Office Action have been addressed. Reconsideration and an early indication of the allowability of the claims are earnestly requested. Should the Examiner have any questions, comments or suggestions that would expedite the prosecution of the present case to allowance, Applicants' undersigned representative earnestly requests a telephone conference at (512) 867-8528.

Respectfully submitted,



Gloria L. Norberg  
Reg. No. 36,706

Date: July 22, 2004

HAYNES AND BOONE, LLP  
901 Main Street, Suite 3100  
Dallas, Texas 75202-3789  
Telephone: (512) 867-8528  
Facsimile: (214) 200-0853

I hereby certify that this paper is being deposited with the United States Postal Service as first class mail in a box addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

\_\_\_\_\_  
DATE

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TYPE OR PRINT NAME

\_\_\_\_\_  
SIGNATURE

## Attachment A



**UNITED STATES DEPARTMENT OF COMMERCE**  
**Patent and Trademark Office**  
ASSISTANT SECRETARY AND COMMISSIONER  
OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

OCTOBER 21, 2003

PTAS

HAYNES AND BOONE, LLP  
GLORIA NORBERG  
901 MAIN STREET, SUITE 3100  
DALLAS, TEXAS 75202-3789



\*700048865A\*

UNITED STATES PATENT AND TRADEMARK OFFICE  
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 10/20/2003

REEL/FRAME: 014051/0993  
NUMBER OF PAGES: 6

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

ARIZONA FOUNDATION, UNIVERSITY OF

DOC DATE: 10/06/2003

ASSIGNEE:

UAF TECHNOLOGIES AND RESEARCH LLC  
1111 NORTH CHERRY AVENUE  
TUSCON, ARIZONA 85721

SERIAL NUMBER: 09676031  
PATENT NUMBER:

FILING DATE: 09/29/2000  
ISSUE DATE:

SERIAL NUMBER: 09676032  
PATENT NUMBER:

FILING DATE: 09/29/2000  
ISSUE DATE:

SERIAL NUMBER: 09676034  
PATENT NUMBER:

FILING DATE: 09/29/2000  
ISSUE DATE:

SERIAL NUMBER: 09703955  
PATENT NUMBER:

FILING DATE: 11/01/2000  
ISSUE DATE:

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SERIAL NUMBER: 09748652  
PATENT NUMBER:FILING DATE: 12/22/2000  
ISSUE DATE:SERIAL NUMBER: 09758853  
PATENT NUMBER:FILING DATE: 01/11/2001  
ISSUE DATE:SERIAL NUMBER: 10132545  
PATENT NUMBER:FILING DATE: 04/25/2002  
ISSUE DATE:SERIAL NUMBER: 10198334  
PATENT NUMBER:FILING DATE: 07/18/2002  
ISSUE DATE:SERIAL NUMBER: 10267051  
PATENT NUMBER:FILING DATE: 10/08/2002  
ISSUE DATE:SERIAL NUMBER: 10280100  
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ISSUE DATE:SERIAL NUMBER: 10288264  
PATENT NUMBER:FILING DATE: 11/06/2002  
ISSUE DATE:SERIAL NUMBER: 10340945  
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ISSUE DATE: 07/10/2001SERIAL NUMBER: 09264942  
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ISSUE DATE: 07/17/2001

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SERIAL NUMBER: 09375173  
PATENT NUMBER: 6265427

FILING DATE: 08/16/1999  
ISSUE DATE: 07/24/2001

SERIAL NUMBER: 09468039  
PATENT NUMBER: 6297384

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ISSUE DATE: 10/02/2001

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PATENT NUMBER: 6392052

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ISSUE DATE: 06/18/2002

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PATENT NUMBER: 6407131

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ISSUE DATE: 06/18/2002

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PATENT NUMBER: 6410575

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PATENT NUMBER: 6423735

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ISSUE DATE: 07/23/2002

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ISSUE DATE: 07/23/2002

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PATENT NUMBER: 6462062

FILING DATE: 09/26/2000  
ISSUE DATE: 10/08/2002

SERIAL NUMBER: 10106429  
PATENT NUMBER: 6479526

FILING DATE: 03/26/2002  
ISSUE DATE: 11/12/2002

SERIAL NUMBER: 09676407  
PATENT NUMBER: 6482843

FILING DATE: 09/29/2000  
ISSUE DATE: 11/19/2002

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SERIAL NUMBER: 09645427  
PATENT NUMBER: 6498188

FILING DATE: 08/24/2000  
ISSUE DATE: 12/24/2002

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PATENT NUMBER: 6506783

FILING DATE: 05/16/1997  
ISSUE DATE: 01/14/2003

SERIAL NUMBER: 09792112  
PATENT NUMBER: 6552059

FILING DATE: 02/23/2001  
ISSUE DATE: 04/22/2003

SERIAL NUMBER: 09670166  
PATENT NUMBER: 6608096

FILING DATE: 09/26/2000  
ISSUE DATE: 08/19/2003

ALLYSON PURNELL, EXAMINER  
ASSIGNMENT DIVISION  
OFFICE OF PUBLIC RECORDS

**ASSIGNMENT**

WHEREAS, the University of Arizona Foundation (Assignor), an Arizona nonprofit corporation, of 1111 North Cherry Avenue, Tucson, Arizona 85721 is the owner, by virtue of assignments filed with the United States Patent and Trademark Office on October 7, 2002, October 30, 2002, February 12, 2003, and August 22, 2003 (copies of which are attached hereto), of the full and exclusive right, title and interest in and to the United States and International patents and patent applications and the inventions described therein and identified in ADDENDUM A attached hereto;

WHEREAS, UAF Technologies and Research, LLC (Assignee), an Arizona limited liability corporation of 1111 North Cherry Avenue, Tucson, Arizona 85721 is desirous of acquiring the entire right, title and interest in and to said patents, patent applications, and said inventions as identified in the attached ADDENDUM A;

FOR GOOD AND VALUABLE CONSIDERATION, the receipt, sufficiency and adequacy of which are hereby acknowledged by Assignor, the University of Arizona Foundation does hereby:

SELL, ASSIGN AND TRANSFER, pursuant to a Capital Transfer Agreement dated July 3, 2003, to UAF Technologies and Research, LLC, its successors, assigns and legal representatives, the entire right, title, and interest in and to said patents, patent applications, and said inventions for the United States and all foreign countries which are disclosed in the patents and patent applications of Addendum A, and all divisional, continuing, substitute, renewal, reissue, extensions, and all other applications for patent which have been or shall be filed in the United States and all foreign countries on any of such inventions; all original and reissued patents which have been or shall be issued in the United States and all foreign countries on such inventions; and specifically including the right to file foreign applications under the provisions of any convention or treaty and claim priority based on such application in the United States; including the right to collect past damages;

AUTHORIZE AND REQUEST the issuing authority to issue any and all United States and foreign patents granted on such inventions to the Assignee, and further agrees, at the expense of the Assignee, to carry out in good faith the intent and purpose of this assignment by executing all patent applications, executing all rightful oaths, declarations, assignments, powers of attorney and other papers in connection therewith necessary to perfect such rights, title and interest, communicating to the Assignee all facts known to the undersigned relating to such inventions and the history thereof; and by aiding said Assignee, its successors, assigns and legal representatives to obtain and enforce proper protection for said inventions in all countries.

IN WITNESS WHEREOF, the undersigned duly authorized officer of Assignor has executed this document this 6th day of October, 2003.

THE UNIVERSITY OF ARIZONA FOUNDATION

By: 

Gary N. Scrivner, Ph.D., CPA

Vice President for Finance and Administration

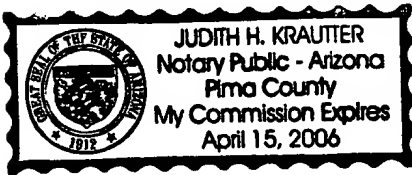
Attachments (Addendum A; assignments to the University of Arizona Foundation dated October 7, 2002, October 30, 2002, February 12, 2003 and August 22, 2003)



THE STATE OF ARIZONA       §  
   §  
COUNTY OF Pima       §

Before me, the undersigned, a Notary Public, on this day personally appeared GARY N. SCRIVNER known to me to be the person and officer whose name is subscribed to the foregoing instrument and acknowledged to me that the same was the act of the University of Arizona Foundation, an Arizona nonprofit corporation, and that he has executed the same as the act of such corporation for the purpose and consideration therein expressed, and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE on this 6th day of  
OCTOBER, 2003.



(PERSONALIZED SEAL)

Judith H. Krautter  
Notary Public Signature

## ADDENDUM A

Patents and Patent Applications				
Ref. Nos:	Serial No.	Filing Date	Patent No. or Pub. No.	Issue Date or Pub. Date
5637US	08/420,913	04/12/95	5,629,341	05/13/97
5638DUS	08/771,193	12/20/96	5,767,138	06/16/98
5638D2CUS	09/264,942	03/09/99	6,262,093	07/17/01
5638D2CDUS	09/748,651	12/22/00	6,362,207	03/26/02
5638D2CDCUS	10/106,429	03/26/02	6,479,526	11/12/02
5702CRUS	09/375,173	08/16/99	6,265,427	07/24/01
5702CRCUS	09/792,112	02/23/01	6,552,059	04/22/03
5785D2RUS	09/408,664	09/29/99	6,177,460	01/23/01
5785D2RCUS	09/748,652	12/22/00	2001-0002403	05/31/01
5785D2RD2US	09/645,427	08/24/00	6,498,188	12/24/02
6643US	08/857,811	05/16/97	6,506,783	01/14/03
6643DUS	09/259,969	03/01/99	6,077,862	06/20/00
6643RUS	09/676,407	09/29/00	6,482,843	11/19/02
6643R2US	09/676,034	09/29/00		
6643R4US	09/676,409	09/29/00	6,423,736	07/23/02
6643R5US	09/676,032	09/29/00		
6643R6US	09/676,031	09/29/00		
6643R7US	09/676,030	09/29/00	6,407,131	06/18/02
6643R8US	09/676,029	09/29/00	6,423,735	07/23/02
6643R10US	09/676,202	09/29/00	6,420,411	07/16/02
7485RUS	09/535,172	03/27/00	6,258,831	07/10/01
7485RDUS	09/812,094	03/19/01	6,410,575	06/25/02
7486RUS	09/535,173	03/27/00	6,245,788	06/12/01
7486R2US	09/663,578	09/15/00	6,340,696	01/22/02
7486RCUS	09/871,565	05/30/01	6,384,064	05/07/02
7487RUS	09/538,006	03/29/00	6,194,430	02/27/01
7487RDUS	09/758,853	01/11/01		
7719US	09/374,717	08/13/99	6,423,734	07/23/02
7719CUS	10/198,334	07/18/02	2003-0032664	02/13/03
7879US	09/468,039	12/21/99	6,297,384	10/02/01
7879CUS	09/794,968	02/27/01	6,392,052	05/21/02
8105US	09/578,281	05/25/00	6,384,049	05/07/02
8105PCT	US01/16690	05/23/01	WO 01/89499	11/29/01
8250US	09/670,169	09/26/00	6,407,105	06/18/02
8250PCT	US01/29261	09/19/01	WO 02/26716	04/04/02
8251US	09/670,168	09/26/00	6,462,062	10/08/02
8251DUS	10/267,051	10/08/02	2003-0100592	05/29/03
8252US	09/670,170	09/26/00	6,380,232	04/30/02
8252DUS	10/132,545	04/25/02	2002-0193609	12/19/02
8253US	09/670,166	09/26/00	6,608,096	08/19/03
8315US	09/703,955	11/01/00		
8315CUS	10/280,100	10/24/02	2003-0149088	08/07/03
8315PCT	US01/45019	10/31/01	WO 02/41891	05/30/02
5638D2CDC2US	10/288,264	11/06/02		

Patents and Patent Applications				
Ref. Nos:	Serial No.	Filing Date	Patent No. or Pub. No.	Issue Date or Pub. Date
6643C	10/340,945	01/13/03		
5640US	08/420,935	04/12/95	5,656,615	08/12/97
8253DUS	10/634,542	08/05/03		

## Attachment B



**UNITED STATES DEPARTMENT OF COMMERCE**  
**Patent and Trademark Office**  
ASSISTANT SECRETARY AND COMMISSIONER  
OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

OCTOBER 21, 2003

PTAS

HAYNES AND BOONE, LLP  
GLORIA NORBERG  
901 MAIN STREET, SUITE 3100  
DALLAS, TEXAS 75202-3789



\*700048865A\*

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RECORDATION DATE: 10/20/2003

REEL/FRAME: 014051/0993  
NUMBER OF PAGES: 6

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

ARIZONA FOUNDATION, UNIVERSITY OF

DOC DATE: 10/06/2003

ASSIGNEE:

UAF TECHNOLOGIES AND RESEARCH LLC  
1111 NORTH CHERRY AVENUE  
TUSCON, ARIZONA 85721

SERIAL NUMBER: 09676031  
PATENT NUMBER:

FILING DATE: 09/29/2000  
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SERIAL NUMBER: 09676032  
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014051/0993 PAGE 2

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PATENT NUMBER: 6423736

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PATENT NUMBER: 6462062

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ISSUE DATE: 10/08/2002

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PATENT NUMBER: 6479526

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014051/0993 PAGE 4

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ISSUE DATE: 04/22/2003

SERIAL NUMBER: 09670166  
PATENT NUMBER: 6608096

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ALLYSON PURNELL, EXAMINER  
ASSIGNMENT DIVISION  
OFFICE OF PUBLIC RECORDS



**ASSIGNMENT**

WHEREAS, the University of Arizona Foundation (Assignor), an Arizona nonprofit corporation, of 1111 North Cherry Avenue, Tucson, Arizona 85721 is the owner, by virtue of assignments filed with the United States Patent and Trademark Office on October 7, 2002, October 30, 2002, February 12, 2003, and August 22, 2003 (copies of which are attached hereto), of the full and exclusive right, title and interest in and to the United States and International patents and patent applications and the inventions described therein and identified in ADDENDUM A attached hereto;

WHEREAS, UAF Technologies and Research, LLC (Assignee), an Arizona limited liability corporation of 1111 North Cherry Avenue, Tucson, Arizona 85721 is desirous of acquiring the entire right, title and interest in and to said patents, patent applications, and said inventions as identified in the attached ADDENDUM A;

FOR GOOD AND VALUABLE CONSIDERATION, the receipt, sufficiency and adequacy of which are hereby acknowledged by Assignor, the University of Arizona Foundation does hereby:

SELL, ASSIGN AND TRANSFER, pursuant to a Capital Transfer Agreement dated July 3, 2003, to UAF Technologies and Research, LLC, its successors, assigns and legal representatives, the entire right, title, and interest in and to said patents, patent applications, and said inventions for the United States and all foreign countries which are disclosed in the patents and patent applications of Addendum A, and all divisional, continuing, substitute, renewal, reissue, extensions, and all other applications for patent which have been or shall be filed in the United States and all foreign countries on any of such inventions; all original and reissued patents which have been or shall be issued in the United States and all foreign countries on such inventions; and specifically including the right to file foreign applications under the provisions of any convention or treaty and claim priority based on such application in the United States; including the right to collect past damages;

AUTHORIZE AND REQUEST the issuing authority to issue any and all United States and foreign patents granted on such inventions to the Assignee, and further agrees, at the expense of the Assignee, to carry out in good faith the intent and purpose of this assignment by executing all patent applications, executing all rightful oaths, declarations, assignments, powers of attorney and other papers in connection therewith necessary to perfect such rights, title and interest, communicating to the Assignee all facts known to the undersigned relating to such inventions and the history thereof; and by aiding said Assignee, its successors, assigns and legal representatives to obtain and enforce proper protection for said inventions in all countries.

IN WITNESS WHEREOF, the undersigned duly authorized officer of Assignor has executed this document this 6<sup>th</sup> day of October, 2003.

THE UNIVERSITY OF ARIZONA FOUNDATION

By: 

Gary N. Scrivner, Ph.D., CPA

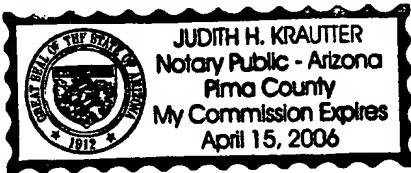
Vice President for Finance and Administration

Attachments (Addendum A; assignments to the University of Arizona Foundation dated October 7, 2002, October 30, 2002, February 12, 2003 and August 22, 2003)

THE STATE OF ARIZONA       §  
   §  
COUNTY OF Pima       §

Before me, the undersigned, a Notary Public, on this day personally appeared GARY N. SCRIVNER known to me to be the person and officer whose name is subscribed to the foregoing instrument and acknowledged to me that the same was the act of the University of Arizona Foundation, an Arizona nonprofit corporation, and that he has executed the same as the act of such corporation for the purpose and consideration therein expressed, and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE on this 6th day of  
OCTOBER, 2009.



(PERSONALIZED SEAL)

Judith H. Krautter  
Notary Public Signature

**ADDENDUM A**

<b>Patents and Patent Applications</b>				
<b>Ref. Nos:</b>	<b>Serial No.</b>	<b>Filing Date</b>	<b>Patent No. or Pub. No.</b>	<b>Issue Date or Pub. Date</b>
5637US	08/420,913	04/12/95	5,629,341	05/13/97
5638DUS	08/771,193	12/20/96	5,767,138	06/16/98
5638D2CUS	09/264,942	03/09/99	6,262,093	07/17/01
5638D2CDUS	09/748,651	12/22/00	6,362,207	03/26/02
5638D2CDCUS	10/106,429	03/26/02	6,479,526	11/12/02
5702CRUS	09/375,173	08/16/99	6,265,427	07/24/01
5702CRCUS	09/792,112	02/23/01	6,552,059	04/22/03
5785D2RUS	09/408,664	09/29/99	6,177,460	01/23/01
5785D2RCUS	09/748,652	12/22/00	2001-0002403	05/31/01
5785D2RD2US	09/645,427	08/24/00	6,498,188	12/24/02
6643US	08/857,811	05/16/97	6,506,783	01/14/03
6643DUS	09/259,969	03/01/99	6,077,862	06/20/00
6643RUS	09/676,407	09/29/00	6,482,843	11/19/02
6643R2US	09/676,034	09/29/00		
6643R4US	09/676,409	09/29/00	6,423,736	07/23/02
6643R5US	09/676,032	09/29/00		
6643R6US	09/676,031	09/29/00		
6643R7US	09/676,030	09/29/00	6,407,131	06/18/02
6643R8US	09/676,029	09/29/00	6,423,735	07/23/02
6643R10US	09/676,202	09/29/00	6,420,411	07/16/02
7485RUS	09/535,172	03/27/00	6,258,831	07/10/01
7485RDUS	09/812,094	03/19/01	6,410,575	06/25/02
7486RUS	09/535,173	03/27/00	6,245,788	06/12/01
7486R2US	09/663,578	09/15/00	6,340,696	01/22/02
7486RCUS	09/871,565	05/30/01	6,384,064	05/07/02
7487RUS	09/538,006	03/29/00	6,194,430	02/27/01
7487RDUS	09/758,853	01/11/01		
7719US	09/374,717	08/13/99	6,423,734-	07/23/02
7719CUS	10/198,334	07/18/02	2003-0032664	02/13/03
7879US	09/468,039	12/21/99	6,297,384	10/02/01
7879CUS	09/794,968	02/27/01	6,392,052	05/21/02
8105US	09/578,281	05/25/00	6,384,049	05/07/02
8105PCT	US01/16690	05/23/01	WO 01/89499	11/29/01
8250US	09/670,169	09/26/00	6,407,105	06/18/02
8250PCT	US01/29261	09/19/01	WO 02/26716	04/04/02
8251US	09/670,168	09/26/00	6,462,062	10/08/02
8251DUS	10/267,051	10/08/02	2003-0100592	05/29/03
8252US	09/670,170	09/26/00	6,380,232	04/30/02
8252DUS	10/132,545	04/25/02	2002-0193609	12/19/02
8253US	09/670,166	09/26/00	6,608,096	08/19/03
8315US	09/703,955	11/01/00		
8315CUS	10/280,100	10/24/02	2003-0149088	08/07/03
8315PCT	US01/45019	10/31/01	WO 02/41891	05/30/02
5638D2CDC2US	10/288,264	11/06/02		

Patents and Patent Applications				
Ref. Nos:	Serial No.	Filing Date	Patent No. or Pub. No.	Issue Date or Pub. Date
6643C	10/340,945	01/13/03		
5640US	08/420,935	04/12/95	5,656,615	08/12/97
8253DUS	10/634,542	08/05/03		